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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/063,782	05/13/2002	Yin-Chun Huang	8963-US-PA	6245

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BERKELEY LAW & TECHNOLOGY GROUP, LLP
1700 NW 167TH PLACE
SUITE 240
BEAVERTON, OR 97006

EXAMINER

GIBBS, HEATHER D

ART UNIT	PAPER NUMBER
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2625

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/21/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/063,782	HUANG, YIN-CHUN ET AL	
	Examiner	Art Unit	
	Heather D. Gibbs	2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 January 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 5-11 and 14-22 is/are rejected.
- 7) ☒ Claim(s) 3-4, 12-13, 23-24 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, see Pages 6-10, filed 01/04/07, with respect to the rejection(s) of claim(s) 1,5-8,10,14-21 under 35 USC 103 and 35 USC 102 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Lu et al (6,046,826).

Claim Rejections - 35 USC § 103

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
3. Claims 1-2, 5,10-11, 14,17-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lu et al (US 6,046,826) in view of Applicant's Admitted Prior Art (APA).

Lu et al discloses a scanning chassis, comprising a case comprising a light transparent slot comprising a substantially bar form shape, wherein two or more width corresponding to two or more points along a longitudinal direction of the light transparent slot are not all the same (Fig 2A; Col 1 Lines 60- Col 2 Line 6).

Lu does not disclose expressly a light source capable of illuminating a document and generating an image at the place where the document is illuminated by the light source; at least one reflector capable of reflecting the image projected through the light transparent slot; a lens assembly capable of refracting the image from said at least one reflector, an optical sensor capable of receiving the image from said lens assembly, and

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wherein the light transparent slot is located along an image path between the light source and the lens assembly.

APA discloses a light source 120 capable of illuminating a document and generating an image at the place where the document is illuminated by the light source; at least one reflector 130 capable of reflecting the image projected through the light transparent slot; a lens assembly 140 capable of refracting the image from said at least one reflector, an optical sensor 150 capable of receiving the image from said lens assembly, and wherein the light transparent slot is located along an image path between the light source and the lens assembly (Fig 1).

Lu & APA are combinable because they are from scanning devices.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine APA with Lu et al.

The suggestion/motivation for doing so would have been to provide the transparent slot along the image path.

Therefore, it would have been obvious to combine APA with Lu to obtain the invention as specified in claim 1.

Considering claim 2, Lu teaches wherein the widths corresponding to the points at two sides of the light transparent slot are larger than the width corresponding to the point at a middle region of the light transparent slot (Fig 2A).

For claim 5, Lu teaches wherein the light transparent slot is substantially shaped like dual trumpets (Fig 2A).

For claim 10, Lu teaches an apparatus, comprising: a light transparent slot of a scanning chassis, wherein the light transparent slot comprised a substantially bar form shape, wherein two or more widths corresponding to two or more points along a longitudinal direction of the light transparent slot are not all the same, wherein the light transparent slot is capable of passing an image of a document (Fig 2A; Col 1 Lines 60- Col 2 Line 6), and APA teaches wherein the light transparent slot is located along an image path between a light source and a lens assembly (Fig 1).

Regarding claim 11, Lu teaches wherein the widths corresponding to the points at two sides of the light transparent slot are larger than the width corresponding to a point at a middle region of the light transparent slot (Fig 2A).

Considering claim 14, Lu discloses wherein the light transparent slot is substantially shaped like dual trumpets (Fig 2A).

For claim 17, Lu teaches an apparatus, comprising: means for illuminating 10 a document to generate an image; and means for passing the image through a light transparent slot, wherein the light transparent slot has a non-uniform width (Col 1 Lines 60- Col 2 Line 6), and APA teaches wherein the light transparent slot is located along an image path between the light source and the lens assembly (Fig 1).

Considering claim 18, Lu teaches wherein the light transparent slot comprised a substantially bar for shape, wherein two or more width corresponding to two or more points along a longitudinal direction of the light transparent slot are not all the same (Fig 2A).

Considering claim 19, Lu teaches wherein the widths corresponding to points at two sides of the light transparent slot are larger than the width corresponding to a point at a middle region of the light transparent slot (Fig 2A).

Regarding claim 20, Lu teaches a method, comprising: illuminating 10 a document to generate an image; passing the image through a light transparent slot comprising a non-uniform width (Fig 2A); and APA teaches passing the image from the light transparent slot to a lens assembly (Fig 1).

For claim 21, Lu teaches wherein said passing the image through a light transparent slot comprising passing the image through a light transparent slot comprising a substantially bar form shape, wherein two or more widths corresponding to two or more points along a longitudinal direction of the light transparent slot are not all the same (Fig 2A).

Regarding claim 22, Lu discloses The method of claim 21, wherein the widths corresponding to points at two sides of the light transparent slot are larger than the width corresponding to a point at a middle region of the light transparent slot (Fig 2A; Col 1 Lines 60- Col 2 Line 6).

4. Claims 6-8,15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lu et al (US 6,046,826) in view of APA and further in view of Nakamura (US 6,891,328).

Lu and APA disclose the scanning chassis as taught above.

Lu and APA do not disclose expressly wherein the optical sensor comprised a charge-coupled device.

Nakamura discloses wherein the optical sensor comprises a charge-coupled device (Col 15 Lines 11-16).

Lu, APA & Nakamura are combinable because they are from the same field of endeavor.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine Nakamura with Lu and APA.

The suggestion/motivation for doing so would have been to enhance the quality of the optical sensor, as taught by APA.

Therefore, it would have been obvious to combine Nakamura with Lu and APA to obtain the invention as specified in claim 6.

Regarding claim 7 it is inherent that the optical sensor can be a CMOS image sensor since the optical sensor is also adapted for a CCD.

Considering claim 8, Nakamura teaches wherein the light source comprises a fluorescent lamp (Col 16 Lines 17-28).

For claim 15, Nakamura discloses wherein the optical sensor comprises a charge-coupled device (Col 15 Lines 11-16).

For claim 16, it is inherent that the optical sensor can be a CMOS image sensor since the optical sensor is also adapted for a CCD.

5. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lu et al (US 6,046,826) in view of APA and further in view of Gubela (US 3,973,342).

Lu and APA disclose the scanning chassis as discloses above.

Lu and APA do not disclose expressly wherein the case comprises an injection-molded case comprising an injection molded light transparent slot.

Gubela discloses a scanning chassis wherein the light transparent slot is formed while the case is fabricated by injection molding (3:36-57).

Lu, APA & Gubela are combinable because they are from the same field of endeavor. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine Gubela with Lu and APA. The suggestion/motivation for doing so would have been to provide an impact resistant plastic.

Therefore, it would have been obvious to combine Gubela with Lu and APA to obtain the invention as specified in claim 9.

Allowable Subject Matter

Claims 3-4,12-13,23-24 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. 10. The following is a statement of reasons for the indication of allowable subject matter: Examiner found no prior art cited in its entirety, nor found any reason to combine said prior art which teaches wherein the widths corresponding to points at two sides are determined at least by a width of a light cone of the image and an allowable error of one or more reflected angles of said at least one reflector.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Heather D. Gibbs whose telephone number is 571-272-7404. The examiner can normally be reached on M-Thu 8AM-7PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Aung S. Moe can be reached on 571-272-7314. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.


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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Heather D Gibbs
Examiner
Art Unit 2625

hdg



AUNG S. MOE
SUPERVISORY PATENT EXAMINER
3/16/07